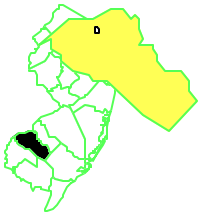
BRIDGEPORT RENTAL & OIL SERVICES

NEW JERSEY

EPA ID# NJD053292652



EPA REGION 2

CONGRESSIONAL DIST. 01

Gloucester County

Other Names:
Bridgeport Water Line
BROS

Site Description

The Bridgeport Rental and Oil Services (or BROS) site is a 30-acre parcel of land, formerly used as a waste oil storage and recovery facility, located in Logan Township, 1 mile east of Bridgeport and 2 miles south of the Delaware River. The property originally housed a tank farm, consisting of approximately 100 tanks and process vessels, drums, tank trucks, as well as a 13-acre waste oil and wastewater lagoon. Initial estimates indicated that the lagoon contained about 2.5 million gallons of oil contaminated with polychlorinated biphenyls (PCBs), 80,000 cubic yards of PCB-contaminated sediments and sludge, and 70 million gallons of contaminated wastewater. The wastewater, as well as the on-site groundwater, has been contaminated with volatile organic compounds (VOCs). Pollution has migrated in the groundwater up to 2400 feet away from the lagoon. The storage tanks contained sludge and sediment material similar to that in the lagoon. The area surrounding the site is primarily rural and agricultural. An active peach orchard borders the site's western edge. Little Timber Creek Swamp, a tidally influenced area, lies to the east and leads to Little Timber Creek, a tributary of the Delaware River. Cedar Swamp lies across Route 130 north of the site, and collects drainage from the site via Little Timber Creek.

The lagoon repeatedly threatened to breach its dike, and did so once in the early 1970s, causing widespread vegetative damage to about 3 acres of land. The aquifer under the site is used for drinking water purposes by about 800 people in the Bridgeport area. The regional groundwater flow in the uppermost aquifer is to the north, in the direction of the Delaware River. At greater depths, the groundwater is flowing to the southeast. Domestic water supply wells lie to the north, northwest, and west of the site; 10 of them are within 50 to 1,000 feet of the site.

Site Responsibility: This site is being addressed through Federal, State and private party actions.

NPL LISTING HISTORY
Proposed Date: 10/01/81
Final Date: 09/01/83

Threats and Contaminants

VOCs, including benzene and methylene chloride, have entered groundwater from materials disposed at the site. Organic contaminants, such as PCBs, and metals, such as lead, cadmium, chromium, and barium have been found in the lagoon sediments and sludges. PCB-laden oil residues have been found in surface water. Tanks on site contained materials similar to those in the lagoon. People may be at risk by drinking contaminated groundwater. Contamination threatens the Little Timber Creek Swamp which drains to Cedar Swamp, an ecologically sensitive area.

Cleanup Approach

The site is being addressed in three stages: emergency actions and two long-term remedial phases focusing on cleanup at the lagoon and tank farm areas and on groundwater treatment.

Response Action Status

Emergency Actions: The EPA sent emergency workers to the BROS site on several occasions when it threatened to overflow its dike. The following actions were taken: (1) in 1981, the failing dike was reinforced, raising the height by about 5 feet; (2) in 1982, the EPA pumped down the lagoon 2 feet and treated the liquids removed; (3) affected homes were provided with filtration units for their well water; (4) in 1983, the lagoon level was lowered again by 2 feet; (5) in early 1984, an initial cleanup measure was taken to address the overflows by pumping down the lagoon water level by 10 feet; (6) in late 1984, workers returned for cleanup and replacement when a failed boom spilled 50 gallons of PCB-contaminated oil; and (7) in 1990, drums containing contaminants were prepared and removed from a warehouse located on the site to an EPA-approved facility. Two of the drums from the warehouse were incinerated on site as well.

Lagoon, Tank Farm, and Wells: In 1984, a Record of Decision (ROD) was signed for the site. The EPA selected the following remedies for cleanup of the lagoon, tank farm, and potentially contaminated residential wells: (1) removing oily waste, contaminated sludges, and polluted water from the lagoon and treating them by on-site incineration; (2) excavating and disposing of drums on the site; (3) continuing to pump to prevent the further spread of contaminated groundwater and to contain any pollutants that may escape during lagoon excavation; (4) removing all tanks and contained waste; and (5) installing a water supply line from Bridgeport to homes with contaminated wells. Conducting a second phase remedial investigation to determine the appropriate groundwater cleanup was also part of the ROD. The drinking water line to provide potable water to 15 affected homes was completed in 1987. The State undertook responsibility for the design and implementation of this action. Between 1987 and 1988, 100 tanks, many of which still contained hazardous wastes, were demolished and removed. More than 250,000 gallons of oils and sludges contaminated with PCBs and about 1 million gallons of liquids were removed from the tanks and taken to EPA-approved disposal facilities, as was debris from the buildings, tanks, vessels, drums, and excavated pipelines. In addition, about 21 million gallons of lagoon wastewater were treated through the on-site treatment system. In 1989, a contract was awarded to commence cleanup by the incineration of lagoon wastes (oil, sediment, and sludges) and area soils. The lagoon wastewater was treated on-site in the treatment system used previously. The mobile

incinerator was assembled on site and a successful trial burn of the unit was completed in April 1991. The contractor was issued notice to proceed with the production burn phase on November 6, 1991, thereby authorizing the full-scale operation of the incinerator on a 24-hour/day basis. As cleanup activities proceeded, significantly greater quantities of material were encountered at the site such as drums, debris, and sediments/sludges. Over 5,000 tons of drums/debris were uncovered from the lagoon and shipped for off-site disposal, while 10,000 tons were incinerated on site. A total of almost 200 million gallons of lagoon water was treated on-site and discharged to Little Timber Creek. Operation of the on-site incinerator ceased in January 1996, upon completion of the lagoon cleanup. About 172,000 tons of contaminated materials (oil, sediments/sludges, soils, and debris) were processed through the thermal destruction unit.

Groundwater: As dictated by the 1984 ROD, the EPA initiated a second study of the site (Phase 2 RI/FS) to determine the extent of contamination in groundwater and adjacent wetlands. The scope of the second phase of site remediation will be determined by the findings of this investigation.

The Phase 2 RI groundwater investigation included the installation and sampling of 44 new monitoring wells. Preliminary data from sampling at these locations indicates that ground water contamination has migrated approximately 300 feet north and 2400 feet southeast from the site. In the spring of 1993, EPA conducted additional sampling of monitoring wells and residential wells down gradient of the site, up to a distance of about 6,000 feet in some locations. The analytical results indicated that no significant site-related contamination was detected at these locations. This was confirmed during the re-sampling of these groundwater monitoring locations in 1999. Wetlands investigations indicate possible contamination of Little Timber Creek Swamp and Little Timber Creek.

As part of a consent decree, a group of settling parties is responsible for completing the Phase 2 RI/FS work under the direction of EPA. The results of this investigation will be outlined in a detailed Phase 2 RI/FS Report for the BROS site.

Site Facts: In June 1982, the Department of Justice, on behalf of the EPA, entered into a consent decree with the owners and operators of the site under the Resource Conservation and Recovery Act (RCRA). In July 1992, the Department of Justice, also on behalf of the EPA, filed a cost recovery action pursuant to the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) against several PRPs implicated at the BROS site. Following lengthy negotiations, a settlement was reached involving over 90 parties. The Consent Decree in this action was finalized in January 1997. The Consent Decree requires the settling parties to pay past response costs, as well as perform the Phase 2 RI/FS which is focused on contamination in groundwater and wetlands remaining at the site following the lagoon cleanup. EPA will oversee the RI/FS activities.

Environmental Progress

The numerous emergency and remedial cleanup actions taken at the BROS facility have greatly reduced the potential for accidental contact with hazardous materials left on site. The 13-acre waste oil lagoon has been cleaned up utilizing on-site incineration. Additional cleanup activities included EPAs dismantling of the former tank farm, and construction of an alternate water supply for 15 homes by the New Jersey Department of Environmental Protection. EPA determined that the site was safe while further investigations leading to the selection of a groundwater remedy and related contamination are

taking place. The Phase 2 Remedial Investigation/Feasibility Study, which will address groundwater and wetlands concerns, is being conducted by the Settling Defendants. The field investigation components of the EPA approved work plan began in mid 1999 and were completed by 2001. Treatability study investigations were conducted in 2002 and the RI/FS is projected to be completed in 2004.

A special project account within the hazardous substances Superfund was established during the 1997 settlement with the settling defendants. In January 2002, EPA began source cleanup activities utilizing the special account funds. The excavation and off-site disposal of 300 drums and associated contaminated soil was completed by 2003. EPA installed and is operating fifteen light non-aqueous phase liquid (LNAPL) recover sumps. To date, approximately 9,000 gallons of LNAPL have been recovered and shipped off-site for disposal. The operation of the LNAPL recovery system will be further evaluated during the RI/FS review process.

Site Repositories

Logan Township Municipal Building 125 Main Street, Bridgeport, New Jersey 08014